

## Patent

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Group Art Unit: 1626  
Examiner: Rei Tsang Shiao  
Confirmation No.: 2442

**JAN 19 2006**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

This Official Communication is being sent by facsimile transmission to the Commission for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 to the following facsimile number:

**Facsimile Number: 571-273-8300**

**Date of Transmission:** January 19, 2006

**This Communication includes:**

## Communication Transmittal Letter

## Communication

**Total Number of Pages (including this page): 12**

**Sender Information**  
**From: Melissa M. Hayworth**  
**Voice Tel. No. 703.838.6663**

I hereby certify that this communication is being submitted to the U.S. Patent and Trademark Office via facsimile on January 19, 2006 to facsimile number 571-273-8300.

Signed \_\_\_\_\_

Patent  
Attorney's Docket No. 005950-836

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of	)	
Shenggao Liu et al.	)	Group Art Unit: 1626
Application No.: 10/622,130	)	Examiner: Rei Tsang Shiao
Filed: July 16, 2003	)	Confirmation No.: 2442
For: HETERODIAMONDOIDS	)	

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JAN 19 2006

**COMMUNICATION TRANSMITTAL**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Enclosed for the above-identified patent application please find:

- ☒ Communication regarding Non-Receipt of Notice of Allowance
- ☒ The Commissioner is hereby authorized to charge any fees required by this paper, or credit any refund overpayment, to our Deposit Account No. 02-4800.

Respectfully submitted,

BUCHANAN INGERSOLL PC

Date: January 19, 2005

By: \_\_\_\_\_

Melissa M. Hayworth  
Reg. No. 45,774

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(650) 622-2300

I hereby certify that this communication is being submitted to the U.S. Patent and Trademark Office via facsimile on January 19, 2006 to facsimile number 571-273-8300.

Signed \_\_\_\_\_

Patent  
Attorney's Docket No. 005950-836

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of

Shenggao Liu et al.

Application No.: 10/622,130

Filed: July 16, 2003

For: HETERODIAMONDOIDS

)  
)  
) Group Art Unit: 1626  
)  
) Examiner: Rei Tsang Shiao  
)  
) Confirmation No.: 2442  
)

RECEIVED  
CENTRAL FAX CENTER  
JAN 19 2006

**COMMUNICATION**

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

With regard to the above-identified application, it has come to our attention today, January 19, 2006, through a status monitoring of the Patent Application Information Retrieval (PAIR) website and a subsequent phone call to Examiner Shiao that a Notice of Allowance was mailed on October 18, 2005; however this Notice of Allowance was returned to the U.S. Patent and Trademark Office as "undelivered" on October 20, 2005. The Notice of Allowance was not re-mailed by the U.S. Patent and Trademark Office; therefore, Applicants' representative has never received the Notice of Allowance.

Because the Notice of Allowance was not received by Applicants' representative, Applicants were not able to pay the issue fee; however, Applicants have no intention of allowing the application to go abandoned. Accordingly, Applicants respectfully request that the Notice of Allowance be resent with a new mailing date and the time period for payment of the issue fee be reset in accordance with the new mailing date.

In support of this request, Applicants attach hereto the following documents:

(a) a copy of the page from PAIR showing the Notice of Allowance mailed on 10/18/05 and showing Mail Returned to the US PTO as undelivered on 10/20/05;

Attorney's Docket No. 005950-836

Application No. 10/622,130

Page 2

(b) a copy of the Notice of Allowance and Fees Due as accessed from PAIR showing the envelope in which the Notice was mailed stamped as Received in the US PTO Mail Center on October 20, 2005; and

(c) a copy of the docket record for the above-identified application generated by Applicants' representatives' docketing software where the non-received Notice of Allowance would have been entered had it been received. The docket record shows the last activity in this application was the filing of a Response to Office Action on August 19, 2005 with a two month extension of time. A Notice of Allowance has not been entered into the docketing record.

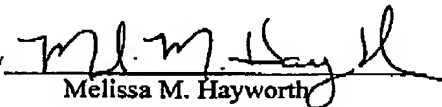
Applicants respectfully request that the Notice of Allowance be resent at this time and that the time period for payment of the issue fee be reset in accordance with the new mailing date. Applicants note that the addressee of record is correct.

Please contact the undersigned should you have any questions regarding this matter.

Respectfully submitted,

BUCHANAN INGERSOLL PC

By

  
Melissa M. Hayworth  
Registration No. 45,774

P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620  
Dated: January 19, 2006

PAIR:



United States Patent and Trademark Office

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PAIR

FAQ

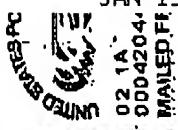
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**Other Links**E-Business  
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LocatorClass/Subclass  
GAU InformationInformation  
Contacts**Image File Wrapper for Application No.: 10/622,130****NEW** Changes to IFW

This application is officially maintained in electronic form. To View: Click the desired Document Description. To Do the desired document(s) and click Download.

Mail Room Date	Document Description	Document Category	Page Count	AI
10/20/2005	Mail returned to USPTO as undelivered	PROSECUTION	12	
10/18/2005	Notice of Allowance and Fees Due (PTOL-85)	PROSECUTION	3	
10/18/2005	Examiner Interview Summary Record (PTOL - 413)	PROSECUTION	2	
10/18/2005	Notice of Allowance and Fees Due (PTOL-85)	PROSECUTION	6	
10/18/2005	Issue Information including classification, examiner, name, claim, renumbering, etc.	PROSECUTION	1	
10/18/2005	Bibliographic Data Sheet	PROSECUTION	1	
10/18/2005	Search Information including classification, databases and other search related notes	PROSECUTION	1	
10/17/2005	Fee Worksheet (PTO-875)	PROSECUTION	1	
08/19/2005	Applicant Arguments or Remarks Made in an Amendment	PROSECUTION	4	
08/19/2005	Claims	PROSECUTION	4	
08/19/2005	Amendment - After Non-Final Rejection	PROSECUTION	1	
08/19/2005	Transmittal to TC	PROSECUTION	2	
08/19/2005	Extension of Time	PROSECUTION	1	
04/19/2005	Bibliographic Data Sheet	PROSECUTION	1	
04/19/2005	List of References cited by applicant and considered by examiner	PRIOR ART	8	
04/19/2005	Non-Final Rejection	PROSECUTION	12	
04/19/2005	Index of Claims	PROSECUTION	1	
04/19/2005	Search information including classification, databases and other search related notes	PROSECUTION	1	
03/14/2005	Examiner's search strategy and results	PROSECUTION	87	
03/03/2005	Examiner's search strategy and results	PROSECUTION	1	
01/24/2005	Response to Election / Restriction Filed	PROSECUTION	4	
01/24/2005	Extension of Time	PROSECUTION	1	
01/24/2005	Transmittal to TC	PROSECUTION	2	
01/24/2005	Authorization for Extension of Time for all replies	PROSECUTION	2	



AN EQUAL OPPORTUNITY EMPLOYER

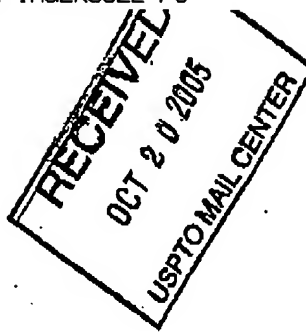
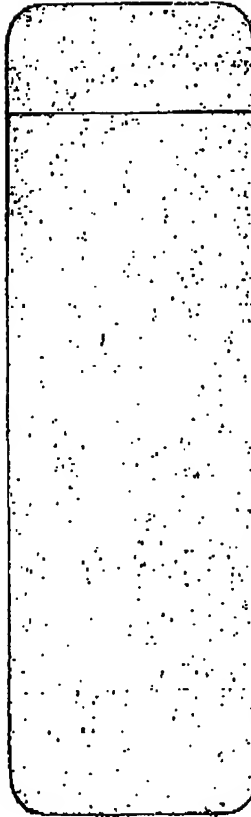


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www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 10/18/2005  
William H. Benz  
BURNS, DOANE, SWECKER & MATHIS, L.L.P.  
P.O. Box 1404  
Alexandria, VA 22313-1404

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OIP/IAF

OCT 20 2005

EXAMINER	
SHIAO, REI TSANG	
ART UNIT	PAPER NUMBER
1626	
DATE MAILED: 10/18/2005	

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,130	07/16/2003	Shengqiao Liu	005950-836	2442

TITLE OF INVENTION: HETERODIAMONDOIDS

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1400	\$300	\$1700	01/18/2005

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

## HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER:** Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/622,130	07/16/2003	Shenggao Liu	005950-836	2442

TS90

10/18/2005

William H. Benz  
 BURNS, DOANE, SWECKER & MATHIS, L.L.P.  
 P.O. Box 1404  
 Alexandria, VA 22313-1404

EXAMINER

SHIAO, REI TSANG

ART UNIT

PAPER NUMBER

1626

DATE MAILED: 10/18/2005

**Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**  
 (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 38 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 38 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.



**Notice of Allowability**

Application No.

10/622,130

Examiner

Robert Shiao

Applicant(s)

LIU ET AL.

Art Unit

1628

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to responses filed on 08/19, 2005.
2. ☒ The allowed claim(s) is/are 1-8, 9-11, 13-15, 26-37, now are 1-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

PATTSY - Patent And Trademark Tracking System		Patent Search
Main Menu	New Search	

REF#	1005950-000836			PRIOR 7/18/2002
COUNTRY	US - UNITED STATES		PATENT TITLE	MAIL 7/16/2003
NEWCON	FCA	SERIAL# 10/622,130	Heterodiamondoids	FILE 7/16/2003
RELATED	1005950-000786	PATENT#		PUBL 3/25/2004
TYPE	UTL	STATUS PUBLISHED		ISSUE
CLIENT	1005950 ChevronTexaco Corporation	CREF 1000055559		1ST 7/16/2003
AGENT		AREF		EXP 7/16/2023

P40608US01	ENTERED 6/2/2003	MODIFIED 8/23/2005	BY CRS	ATTORNEYS EJG/MMH/---
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H ID	ACTION	BASE	DUE IN	DUE	EXTNS	FINAL	EXT RESPONSE	CALL	1	2	P
Y DF	Formal Dwg Filed	7/16/2003									
	ACTION NOTES: 51 sheets										
Y AS	Assignment	11/14/2003									
	ACTION NOTES: R/F 014794/0854										
y PJ	Projected Pub Date	3/25/2004									
Y DS	Inf Disclosure Stmt	7/6/2004									
	ACTION NOTES: 2nd										
Y SI	Supplement IDS Filed	7/12/2004									
	ACTION NOTES: 3rd										
N CE	File Convention Appl	7/18/2002	12M	7/18/2003		7/18/2003	0	7/16/2003	2M	Y	Y
	ACTION NOTES: combined with -786 & 803										
N PC	Post Card Check	7/16/2003	1M	8/16/2003		8/16/2003	0	7/31/2003	0M	Y	Y
N DS	Inf Disclosure Stmt	7/16/2003	3M	10/16/2003	3	1/16/2004	2	12/8/2003	1M	Y	Y
N G2	Missing Parts (2 Mo)	10/20/2003	2M	12/20/2003	5	5/20/2004	0	11/14/2003	2M	Y	Y
N SF	SC - Filing Receipt	7/16/2003	6M	1/16/2004		1/16/2004	0	12/18/2003	15D	Y	Y
N SF	SC - Filing Receipt	7/16/2003	6M	1/16/2004		1/16/2004	0	10/20/2003	15D	Y	Y
N RS	Restrict Require-1M	11/24/2004	1M	12/24/2004	5	5/24/2005	1	1/24/2005	2M	Y	Y
	ACTION NOTES: 1 MONTH EOT FILED 01/24/05										
N RE	Response to OA	4/19/2005	3M	7/19/2005	3	10/19/2005	2	8/19/2005	2M	Y	Y
	ACTION NOTES: 1 MONTH EOT FILED 8-19-05										
N S2	SC - Office Action	8/19/2005	7M	3/19/2006		3/19/2006	0		15D	Y	Y

<b>INVENTORS</b>
Liu, Shenggao
Dahl, Jeremy E.
Carlson, Robert M.

<b>ASSIGNEES</b>
Chavron U.S.A. Inc.

FAMILY MEMBERS							
REF#	COUNTRY	NEW/CON	SERIAL#	FILED	PATENT#	ISSUED	STATUS
1005950-000786	UNITED STATES	NEW	60/397,367	7/18/2002			EXPIRED
1005950-000836	UNITED STATES	FCA	10/622,130	7/16/2003			PUBLISHED
1005953-000467	WIPO	CEQ	US2003/022483	7/17/2003			NAT PHASE
1005953-000700	CANADA	DCA	2,492,857	7/17/2003			PENDING
1005953-000701	CHINA	DCA	03817101.5	7/17/2003			PUBLISHED

## Patent and Trademark Docketing Software - PATTSY

Page 2 of 2

1005953-000702	EUROPEAN	DCA	03765723.6	7/17/2003	PUBLISHED
1005953-000703	HONG KONG	DCA	US2003/022483	7/17/2003	PENDING
1005953-000704	JAPAN	DCA	2004-523563	7/17/2003	PENDING
1005953-000705	SOUTH KOREA	DCA	10-2005-7000697	7/17/2003	PENDING